TABLE OF CONTENTS

EXECUTIVE SUMMARY	Click Here To View	i
INTRODUCTION		
Background		1
Scope, Objectives, and Method	lology	2
Finding I The Environmental Services De The City Council With Revised For The Recycle Plus 2002 Prog	Cost And Revenue Estima	ites
ESD Memorandums		6
Countervailing Assumption and	d Methodological Errors	6
Underestimated The Proje Program By \$57.6 Million	cted Cost Of The Current	7
	Of The Proposed Recycle Pa \$39.6 Million	
	ntial Cost Avoidance By \$18	
Revenue Reductions		12
Potential \$33 Million MFI	D Revenue Reduction	12
Potential \$7 Million Redu	ction In Projected YT Reven	ue12
	FD Revenue Due To Contai	
Impact On Source And Use Of	Funds	13
Finding II The Environmental Services De Contingency Plan To Address R Providers' Potential Operationa	Recommended Recycle Plus	S
The ESD's Process To Evaluat Plus 2002 RFP	•	
Financially Sound, Technically Acquiring Essential Capital Eq	-	
Norcal's Loss Of The San	Bernardino County Contrac	ct19
Financially And Operationally Proposed Services	-	

Achieving 25	%, 30%, and 35% MFD Recycling Goals	20
9	Unknown Mix Of Street And Yard Trimmings s	21
9	quiring, And/Or Building A Headquarters And covery Facility	23
Predicating I	ts RFP Response On A 9½ Hour Workday	25
Potential Un	ion Issues	26
Optimistic Tr	ravel Time Estimates	27
	rovisions In The Proposed Recycle Plus 2002 ervices Agreement	34
	Click Here To View PRIOIRITY 1, 2, AND 3 AUDIT TONS Click Here To View	A-1
	F SFD RATES	B-1
APPENDIX C COMPARISON OI	Click Here To View F YT AND RSS PROPOSALS	C-1
	Click Here To View COMPARISONS AND SS TESTS	D-1
APPENDIX E	Click Here To View	

MAPS OF CURRENT AND PROPOSED CONTRACTORS

BY DISTRICT AND SERVICE E-1

Table Of Exhibits

Exhibit 1 ESD Estimates Of Current And Recommended Program Costs Over The Term Of The New Contracts (In Millions)
Exhibit 2 Original And Revised Estimated Current Program Costs Over The 11- Year Term Of The New Contracts (In Millions)
Exhibit 3 Original And Revised Estimated Proposed Recycle Plus 2002 Program Costs Over The 11-Year Term Of The New Contracts (In Millions)9
Exhibit 4 Comparison Of ESD's Original To Revised Projected Program Costs Over The 11-Year Term Of The New Contracts
Exhibit 5 Summary Of The New Estimated Costs For Current And Proposed Contracts And Projected Cost Avoidance Over The 11-Year Term Of The New Contracts (In Millions)
Exhibit 6 Estimated Recycle Plus And Recycle Plus 2002 Program Costs From 1999-00 Through 2012-13
Exhibit 7 Potential Operational Issues And Uncertainties For Recommended Proposers For Recycle Plus 2002
Exhibit 8 Current Recycle Plus Contractors
Exhibit 9 Recycle Plus Proposal Evaluation Criteria
Exhibit 10 Proposed Recycle Plus Contractors
Exhibit 11 Schedule For 10 th Street And Burke Street Processing Facility Improvements
Exhibit 12 Estimate Of Truck/Loader Requirements
Exhibit 13 Typical Driver's Workday Assuming An 8-Hour Workday28
Exhibit 14

Norcals's Travel And Other Time-Element Assumptions.......28

Exhibit 15 SFD Split-Content Truck Travel Time Elements	29
Exhibit 16 Yard Trimmings Route Travel Time Elements	31
Exhibit 17 Comparison Of Norcal's And The City Auditor's Estimated Travel Times For SFD And YT In Districts A And C	32

INTRODUCTION

In accordance with City Council direction on October 10, 2000, we have reviewed the recommended contractors for the Recycle Plus 2002 Program. We conducted our review in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Scope and Methodology section of this report.

The City Auditor's Office thanks the representatives of GreenTeam of San Jose, GreenWaste Recovery Inc. and Norcal Waste Systems Inc., and the employees of the Environmental Services Department (ESD) and its consultant, R.W. Beck, who gave their time, information, and cooperation on a very short time-frame for this review.

Background

On October 10, 2000, the City Council approved recommendations in an October 8, 2000, memorandum from Mayor Gonzales, Vice Mayor Fiscalini, and Council Members Chavez, Dando, and Powers to:

- 1. Process the award of Recycle Plus contracts as recommended by Staff;
- 2. Direct the Administration to negotiate final agreements and return to Council within 60 days;
- 3. Direct the Administration to report to Council in three weeks on the economic feasibility of achieving rate reduction and/or improved service for residents from the savings expected from the Staff recommendation;
- 4. Direct the Administration to report to Council quarterly on progress to assure a smooth transition, including customer outreach and education and costs for monitoring, marketing, and community outreach for the transition period;
- 5. Direct the City Auditor to perform a review audit of all recommended haulers to determine the operational adequacy of their proposals and their financial capability to perform;
- 6. Direct the Administration to evaluate the maximum feasible performance bond to be provided by each hauler and appropriate penalty language in the contracts to guarantee performance and prohibit requests for rate increases beyond those stipulated in the final agreement; and
- 7. Direct the Administration to clarify the City's prevailing wage, employee retention and labor peace policies as they relate to the Request for Proposals (RFP) for Recycle Plus, and ensure their inclusion in the negotiated contract; as stipulated in the aforementioned October 8, 2000 memorandum.

The Council also gave the specific following:

- a) Direction for the City Attorney to review the recommended haulers for pending litigation or liability exposure;
- b) Direction for the City Auditor to include in his audit of the recommended haulers their financial capability to acquire essential capital equipment, including assessing the effectiveness of the split-content trucks and whether contracts have recently been lost, creating a potential negative impact to the financial assessments; and
- c) Direction for Staff to provide to Council the financial assessments already conducted for review prior to the audit report; and to report back with information on the amount of savings expected from the first 5-year contract, operational cost figures with labor costs separated out; whether other companies have serviced areas as large as that proposed for award to a single provider; available fallback positions in the event of non-performance; providing yard waste containers free on request to all residents; and to take into consideration concerns raised about rate review processes, the performance bond, maintaining the same or better levels of service; labor peace, worker retention and prevailing wage issues; improved implementation of street sweeping; increasing the number of bins for neighborhood clean-ups; and maintaining uninterrupted service during the transition period.

Scope, Objectives, and Methodology

The objective of our review was to evaluate the recommended Recycle Plus 2002 contractors to determine the operational adequacy of their proposals and their financial capability to perform. We reviewed the operational and financial assessments that the ESD already performed as part of the RFP evaluation process including the assumptions that ESD used to evaluate the proposals. We compared proposed pricing among the seven respondents to the RFP (see Appendices B and C).

We summarized and compared the operational differences between the proposals including the proposed number of trucks and routes, number of loads per day, estimated tons per load, and estimated collection time per route. We assessed the impact of various operational scenarios including travel time and length of workday on the proposers' abilities to perform as planned. A summary of these operational comparisons is included in Appendix D. We performed limited testing of hauler assumptions regarding travel time using six judgementally-selected locations in the southern part of the City. We obtained and reviewed additional information regarding the impact of subsequent events and litigation.

We reviewed the proposers' proprietary cost-of-service calculations for reasonableness. In so doing, we took only temporary custody of proprietary information that has since been returned to the proposers.

During the course of our review, we determined that there was at least one error in the cost calculations that the ESD had provided to the City Council on October 10, 2000. We constructed a parallel set of spreadsheets to test our calculations. In a joint effort involving the City Auditor's Office, the ESD, and its consultant, additional cost calculation errors were identified. The ESD has now corrected those errors, and the cost calculations that appear in this report are the result of that collaborative effort.

Finally, we reviewed the financial capability of the recommended haulers to acquire essential capital equipment, assessed the effectiveness of split-content trucks, and whether any of the proposed haulers have recently lost contracts that could create a negative impact to their financial assessments. We limited our assessment of the effectiveness of split-content trucks to discussions with the proposed haulers, a review of split-content truck manufacturers' literature, and an evaluation of the reasonableness of the proposed haulers' assumptions regarding the capabilities of split-content trucks in their responses to the Recycle Plus 2002 RFP.

Finding I

The Environmental Services Department Needs To Provide The City Council With Revised Cost And Revenue Estimates For The Recycle Plus 2002 Program

In a September 22, 2000 memorandum to the City Council, the Environmental Services Department (ESD) stated that the proposed Recycle Plus 2002 Program would generate a savings of \$74 million over the 11-year term of the new contract. The ESD subsequently issued an October 4, 2000 memorandum to the City Council that reduced its previous estimate of \$74 million to \$60.6 million. In a joint effort involving the City Auditor's Office, the ESD, and its consultant, several countervailing assumptions and methodological errors were identified regarding the \$74 million and \$60.6 million cost avoidance for the Recycle Plus 2002 Program noted above. Specifically, the City Auditor's Office, the ESD, and its consultant agree that the ESD's original estimate of the 11-year cost of the Recycle Plus 2002 Program

- Underestimated the cost of the current program by \$57.6 million;
- Underestimated the cost of the proposed program by \$22 million to \$39.6 million; and
- Underestimated the potential cost avoidance of the proposed program by \$18 million to \$35.6 million.

Further, under the current rate structure Integrated Waste Management (IWM) Fund revenues could decline by about \$33 million in the Multi-family Dwelling (MFD) component during the 11-year term of the proposed Recycle Plus 2002 Program. In addition, City Council rate-setting decisions regarding Yard Trimmings (YT) carts and 20-gallon garbage containers for the Single Family Dwelling (SFD) component, could reduce projected YT component revenues by as much as \$7 million and reduce SFD component revenues by an inestimable amount.

Accordingly, we recommend that the ESD submit to the City Council a revised cost and revenue estimate for the Recycle Plus 2002 Program together with a Source and Use of Funds statement for the IWM Fund through the year 2006-07. Further, the ESD should analyze and report to the City Council the revenue, cost, and programmatic implications of any potential City Council pricing decisions regarding MFD rates, YT carts, and 20-gallon garbage containers. Finally, we recommend that the City Council wait until the ESD reports on its revenue and cost analyses on any City Council pricing decisions before adding services to or revising rates for the proposed Recycle Plus 2002 Program.

ESD Memorandums

In its September 22, 2000, memorandum to the City Council, the ESD stated that the Recycle Plus 2002 Program will provide enhanced services at substantial cost savings over the current program. The ESD estimated that the cost of continuing the existing program over the new 11-year term of the contract was approximately \$643.7 million. The ESD estimated that the total cost of the recommended system over the entire 11-year contract term was about \$569.7 million, representing a cost savings of about \$74 million over the current program.

In a supplemental memorandum to the City Council dated October 4, 2000, the ESD increased the total cost of the recommended system by \$13.4 million, thereby reducing the estimated cost savings over the 11 years from about \$74 million to about \$60.6 million. These changes reflected clarification to the rates for services that GreenWaste Recovery, Inc., submitted in its response to the Recycle Plus RFP. Exhibit 1 summarizes the ESD's cost estimates.

Exhibit 1

ESD Estimates Of Current And Recommended Program Costs
Over The Term Of The New Contracts (In Millions)

	Current Program	Recommended Program	Recommended Program – Revised Estimate
SFD	\$398.9	\$323.3	\$323.3
MFD	83.0	69.0	69.0
YT & RSS ¹	161.8	177.4	190.8
Total	\$643.7	\$569.7	\$583.1
Cost Savings		\$74.0	\$60.6

Countervailing Assumption and Methodological Errors

While reviewing the Recycle Plus proposers' operational capacity, we noted an error in the costing model that the ESD used to prepare the above estimates of program costs and savings. The error related to the number and capacities of proposed MFD recycling containers. In a joint effort involving the City Auditor's Office, the ESD, and its consultant, the following cost calculation errors were identified.

¹ Residential Street Sweeping (RSS).

Underestimated The Projected Cost Of The Current Program By \$57.6 Million

After lengthy discussions, the Auditor's Office and the ESD agree that the cost of the current program extended over the 11-years of the proposed contracts was underestimated by about \$57.6 million.

The largest portion of this adjustment is due to an error in CPI adjustments. The current contracts allow for annual CPI adjustments on July 1st of each year. The cost estimates that the ESD included in its September 22, 2000, and October 4, 2000, memorandums to the City Council, were based on actual contract costs for 1999-2000. These cost estimates did not include projected CPI adjustments that would take place on July 1, 2000 and July 1, 2001. The July 1, 2000 CPI adjustment was 4.08 percent, while the ESD projects a 3.63 percent CPI adjustment for July 1, 2001.

In addition, the ESD's original cost estimate was based on the number of service recipients in 1999-2000. According to the ESD, the number of service recipients increases by about 0.5 percent per year. Accordingly, the ESD's original cost estimate for the current program should be increased for both CPI and growth factors in 1999-2000 and 2000-01.

Exhibit 2 shows the ESD's original cost estimate for the current program and the revised estimate after adjusting for CPI and growth factors.

Exhibit 2

Original And Revised Estimated Current Program Costs

Over The 11-Year Term Of The New Contracts (In Millions)

	Original Estimate	Revised Estimate
SFD	\$398.9	\$434.5
MFD	83.0	90.5
YT & RSS	161.8	176.3
Total	\$643.7	\$701.3
Difference		\$57.6

Underestimated The Cost Of The Proposed Recycle Plus 2002 Program By \$22 To \$39.6 Million

The ESD and the City Auditor's Office agree that the projected cost of the proposed Recycle Plus 2002 Program was underestimated by \$22 million to \$39.6 million over the 11-year term of the new contracts. In its October 4, 2000, memorandum, the ESD estimated the 11-year cost of the proposed contracts at \$583.1 million. After much discussion, calculation, and re-calculation, the

Auditor's Office and the ESD agreed that the following cost items need to be corrected:

- Add \$9.3 million in projected alternative fuel charges to the single family dwelling (SFD) portion of the 11-year cost estimate.
- Subtract \$20.1 million from projected 11-year costs to correct for misapplication of an inflation factor in the first year of the proposed contracts.
- Add \$3.3 million to yard trimmings 11-year cost estimate because 4,428 customers were inadvertently omitted from the yard trimmings cost estimate.
- Add \$10.5 million to projected 11-year costs to correct for estimated growth in the number of SFD, multi-family dwelling (MFD), and yard trimmings (YT) customers between 1999-00 and the July 1, 2002 start date.

In addition, there are two other cost items that need to be corrected but for which the Auditor's Office and the ESD could only agree upon a range within which the correction should be made. These include:

• Add \$10.8 million to \$18.9 million (net) to projected MFD costs to correct for underestimating the number and capacity of MFD recycling bins, and overestimating the number and capacity of MFD garbage bins.

GreenTeam, the current and proposed MFD contractor, has about 6,500 garbage bins and 16,375 recycling carts in service at about 3,400 complexes citywide. MFD recycling tonnage is currently about 13 percent of the total MFD waste stream. The proposed MFD program mandates single-stream recycling containers and 35 percent diversion by calendar year 2005. In order to fulfill their agreement with the City, the contractor will need to place sufficient single-stream recycling containers at convenient MFD locations to accommodate a 35 percent diversion.

The contractor has indicated that, at a minimum, the number of recycling containers will match the number of garbage containers. In other words, the contractor envisions an MFD recycling container next to every MFD garbage container, with the same collection frequency for both. This adds \$18.9 million to the cost of the proposed program over 11 years. The ESD, however, estimates that no more than 10 percent of garbage and recycling containers will be picked up more than once per week. This adds only \$10.8 million to the cost of the proposed program over 11 years.

• Add \$8.2 million to \$17.7 million to estimated 11-year yard trimmings costs. The ESD model originally assumed 15 percent of SFD residents would sign up for subscription yard trimmings carts. However the model did not include about 12 percent of residents who currently have mandatory containerized yard trimmings collection. Thus, the 11-year cost estimate should have been based on a minimum of 27 percent yard trimmings containers (12 percent plus 15 percent) which adds \$8.2 million to the cost of the proposed program over 11 years.

The ESD based its 15 percent cart usage assumption on a Recycle Plus customer survey that reported:

"When residents are confronted with a proposal to put yard trimmings in a wheeled cart for collection, 41 percent prefer this new proposal and 54 percent prefer the current system where yard trimmings are put directly on the street. Support for the new system decreases when residents are told it would cost an extra dollar a month in collection fees. Among those who had preferred the new system, 24 percent now choose the current system."

In our opinion, should the City Council decide to offer a free YT cart service, then YT usage could range as high as 41 percent. This would add \$17.7 million to the cost of the proposed program over 11 years.

Exhibit 3 compares the original estimate of proposed contract costs over the 11-year term to our revised estimate of proposed contract costs over the 11-year term.

Exhibit 3

Original And Revised Estimated Proposed Recycle Plus 2002

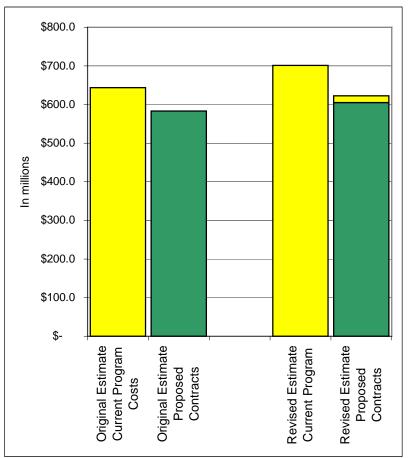
Program Costs Over The 11-Year Term Of The New Contracts
(In Millions)

	Original Estimate	Revised Estimate
SFD	\$323.3	\$327.8
MFD	69.0	78.5 to 86.6
YT & RSS	190.8	198.8 to 208.3
Total	\$583.1	\$605.1 to 622.7
Difference		\$22.0 to 39.6

Thus, as shown in Exhibits 2 and 3, the City Auditor's Office and the ESD agree that the projected costs of the current program were underestimated by \$57.6 million and the projected costs of the proposed program were underestimated by \$22 million to \$39.6 million. Exhibit 4 is a graphic comparison of the original and revised projected Program costs.

Exhibit 4

Comparison Of ESD's Original To Revised Projected Program
Costs Over The 11-Year Term Of The New Contracts



It should be noted that the "Revised Estimate Proposed Contracts" shown above includes a shaded area that represents a \$17.6 million range from \$605.1 million to \$622.7 million.

Underestimated The Potential Cost Avoidance By \$18 To \$35.6 Million

As a result of the above countervailing errors, the City Auditor's Office and the ESD now estimate that the potential cost avoidance of the proposed contracts should be increased by \$18 million to \$35.6 million over the 11 years of the contract. Exhibit 5 summarizes the new estimated cost avoidance over the 11-year term of the new contracts.

Exhibit 5

Summary Of The New Estimated Costs For Current And Proposed Contracts And Projected Cost Avoidance Over The 11-Year Term Of The New Contracts (In Millions)

	SFD	MFD	YT &	TOTAL
			RSS	
ESD'S Original Estimate Of Costs				
Current Providers	\$398.9	\$83.0	\$161.8	\$643.7
Recommended Providers	323.3	69.0	190.8	583.1
Estimated Cost Avoidance (Increase)	\$75.6	\$14.0	\$(29.0)	\$60.6

Summary Of Adjustments To Increase (Decrease) ESD's Original Estimate Of Cost Avoidance

For Current Providers:				
Add CPI Adjustment for 2000-2002	\$ 35.6	\$ 7.5	\$ 14.5	\$ 57.6
For Recommended Providers:				
Add Alternative Fuel Charges	(9.3)			(9.3)
Eliminate Inflation Factor in the First Year				
	11.3	2.3	6.5	20.1
Add 4,428 Customers			(3.3)	(3.3)
Increase Number of Customers in the First				
Year	(6.5)	(1.0)	(3.0)	(10.5)
Increase Number of Recycling Containers by				
3,419, Reduce Garbage Container Sizes and		(10.8) to		(10.8) to
Collection Frequencies		(18.9)		(18.9)
Increase Percentage of Residents Requesting			(8.2) to	(8.2) to
Yard Trimmings Carts From 15 percent to			(17.7)	(17.7)
27 percent or 41 percent				
Total Adjustments To	\$31.1	\$(10.1) to	\$(3.0) to	
Avoided Costs		\$(2.0)	\$6.5	\$35.6

Revised Total Avoided Costs	\$106.7	\$3.9 to \$12.0	\$(32.0) to	\$78.6 to \$96.2
			\$(22.5)	

Revenue Reductions

Under the current rate structure IWM Fund revenues could decline by about \$33 million in the MFD component during the 11-year term of the proposed Recycle Plus 2002 Program. In addition, City Council rate-setting decisions regarding YT carts and 20-gallon garbage containers for the SFD component, could reduce projected YT component revenues by as much as \$7 million and reduce SFD component revenues by an inestimable amount.

Potential \$33 Million MFD Revenue Reduction

MFD customers pay monthly fees for garbage bin collection based on the size of their garbage bin and the frequency of collection. For example, the collection fee for a one cubic yard garbage bin picked up once per week is \$60.02 per month, while the collection fee for the same one cubic yard bin picked up three times per week is \$157.39 per month. There is no separate charge for recycling.

Recycle Plus 2002 requires an increase in MFD recycling from about 13 percent to 35 percent (or more) of the MFD waste stream by the end of 2005. As a result, MFD owners should downsize their garbage bins and/or reduce the frequency of collection. This positive behavioral change will have a negative impact on Recycle Plus 2002 revenues. In fact, under the current MFD rate structure, this could reduce Recycle Plus 2002 MFD revenue by as much as \$33 million over the 11 years of the proposed program.

Potential \$7 Million Reduction In Projected YT Revenue

Finally, it should be noted that for purposes of projecting IWM fund balance, the ESD included approximately \$7 million in additional revenues from optional YT subscription carts over the 11 years of the contract. According to the ESD, it based its estimate upon prior City Council direction regarding a nominal YT cart subscription rate, and an assumed \$2 monthly subscription fee per cart for 15 percent of YT customers. Because the City Council has not approved a \$2 monthly YT cart subscription fee, this projected revenue may not materialize.

Unknown Reductions In SFD Revenue Due To Container Downsizings

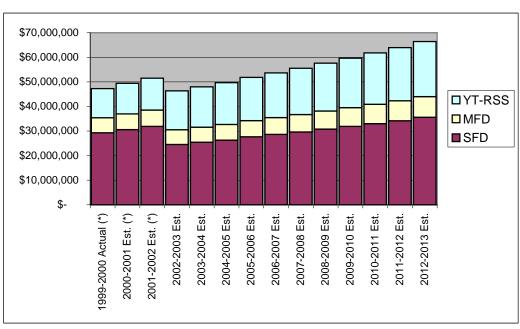
Similarly, if the single-stream recycling program is successful in raising recycling rates citywide, then some SFD customers will downsize their garbage containers. For example, a customer with a 96-gallon cart might exchange his or her cart for a 64-gallon cart. Similarly, a customer with a 64-gallon cart may downsize to a 32-gallon cart. Far more importantly, the introduction of a 20-gallon SFD garbage container at an as yet unknown fee would also reduce Recycle Plus 2002 revenues. As a result, pending changes in the Recycle Plus 2002 rate structure, increased recycling will reduce IWM fund revenues by an inestimable amount.

Impact On Source And Use Of Funds

In our opinion, the cost and revenue implications cited above will significantly affect the IWM fund over the 11 years of the proposed Recycle Plus 2002. In fact, we estimate that after an initial reduction in total program costs in 2002-03, program costs will equal or exceed the current program's 1999-00 costs as early as the second year of the 11-year contract. Exhibit 6 is a graphic depiction of our estimated Recycle Plus and Recycle Plus 2002 program costs from 1999-00 through 2012-13.

Exhibit 6

Estimated Recycle Plus And Recycle Plus 2002 Program Costs
From 1999-00 Through 2012-13²



(*) Current program costs.

² Estimated contract costs increase each year as a result of two factors: projected growth in the number of service recipients (estimated at 0.5 percent per year) and projected annual cost-of-living adjustments (estimated at 3 percent per year).

Accordingly, we recommend that the ESD:

Recommendation #1

Submit to the City Council a revised cost and revenue estimate for Recycle Plus 2002 together with a Source and Use of Funds statement for the IWM Fund through the year 2006-07. (Priority 3)

Recommendation #2

Analyze and report to the City Council on the revenue, cost, and programmatic implications of potential City Council pricing decisions regarding Multi-Family Dwelling rates, Yard Trimmings cart subscription fees, and 20-gallon garbage container rates. (Priority 3)

We also recommend that the City Council:

Recommendation #3

Wait until the ESD reports on its revenue and cost analyses on any City Council pricing decisions before adding services or revising rates for Recycle Plus 2002. (Priority 3)

Finding II

The Environmental Services Department Needs To Develop A Contingency Plan To Address Recommended Recycle Plus Providers' Potential Operational Issues And Uncertainties

The Environmental Services Department (ESD) developed and used a sophisticated and extensive process to evaluate the respondents to its Request For Proposal (RFP) for the Recycle Plus 2002 Program. As a result of its evaluation process, the ESD recommended for Single Family Dwelling (SFD), Multi-Family Dwelling (MFD), Yard Trimmings (YT), and Residential Street Sweeping (RSS) service GreenTeam of San Jose (GreenTeam), GreenWaste Recovery, Inc. (GreenWaste), and Norcal Waste Systems, Inc. (Norcal). We have evaluated the financial capability and operational adequacy of the recommended haulers' proposals relative to the Recycle Plus 2002 Program. In our opinion, all three proposers are:

- Financially sound, technically qualified, and capable of acquiring essential capital equipment; and
- Financially and operationally capable of performing the services they proposed in their response to the Recycle Plus 2002 RFP.

In addition, Norcal's recent loss of its contract with San Bernardino County will not, in our opinion, create a significant negative impact on Norcal's financial assessment.

However, we did note several potential operational issues and uncertainties that could impact the recommended proposers' financial capability and operational adequacy to perform under a Recycle Plus 2002 contract. Specifically, we identified the following potential operational issues and uncertainties:

Exhibit 7

Potential Operational Issues And Uncertainties For Recommended Proposers For Recycle Plus 2002

	Recommended Proposer/Service Component					
Potential Operational Issues And Uncertainties	Green	Team	Green Waste		Norcal	
	SFD	MFD	YT	YT	RSS	SFD
Achieving 25%, 30%, And 35% Recycling Goals		X				
Servicing An Unknown Mix Of Street And Yard Trimmings Cart Set-Outs			X	X		
Locating, Acquiring, And/Or Building A Headquarters And Materials Recovery Facility				X		X
Predicating Its RFP Response On A 9.5 Hour Workday				X		X

In our opinion, the ESD needs to develop a contingency plan to address the above potential operational issues and uncertainties. By so doing, the City of San Jose will have added assurance that the transition to the Recycle Plus 2002 Program will go smoothly and without any service interruptions to its residents.

The ESD's Process To Evaluate Respondents To The Recycle Plus 2002 RFP

The City of San Jose's Recycle Plus Program was originally launched in 1993. The program utilizes external contractors to provide automated collection of garbage in a choice of three cart sizes, unlimited curbside collection of recyclables, and unlimited on-street yard trimmings collection. This weekly service is provided to 195,000 single family dwellings. Similar services are provided to 85,000 multi-family dwellings. Exhibit 8 summarizes the current contractor configuration.

Exhibit 8

Current Recycle Plus Contractors³

Type of Service	District A	District B	District C		
Single Family	GreenTeam	USA Waste	USA Waste		
Multi-family	GreenTeam				
Yard Trimmings and Street Sweeping	BFI	GreenWaste	GreenWaste		

³ Maps of current and proposed contractors by district and service are shown in Appendix E.

The existing service contracts with BFI Waste Systems of North America Inc., GreenTeam, GreenWaste, and USA Waste of San Jose expire on June 30, 2002. Over the past several years, the City Council has adopted a series of policies to steer the Recycle Plus Program into its next phase. On October 26, 1999, the City Council directed the Administration to develop an RFP for the 2002 Recycle Plus Program. The City released the RFP on April 28, 2000. Seven proposers responded by the deadline of July 14, 2000.

The ESD coordinated the proposal evaluation process during Summer 2000. The process incorporated three review committees:

- A Staff Evaluation Panel comprised of professional staff from various City departments, including ESD, Streets and Traffic, Finance, and the City Attorney's Office;
- 2. An External Panel of solid waste leaders from across the western United States, including representatives from the cities of Phoenix, Arizona; Portland, Oregon; Seattle and Tacoma, Washington; and the County of Santa Cruz; and
- 3. A City Executive Committee comprised of the Directors of the ESD, Streets and Traffic, Finance, the Office of Equality Assurance, and the Senior Deputy City Manager.

The ESD utilized the services of R.W. Beck, a Sacramento consulting firm, to construct a computerized evaluation model. Professional staff from various City departments evaluated proposers based on experience, customer service, strength of operations, technical capability, and business risk. Using a table of assumptions regarding the number of service recipients and service units by type and district, the evaluation model tabulated the cost of 3,000 possible combinations of services by hauler. Once these evaluations were complete, the model tabulated scores and applied weighting factors as follows:

Exhibit 9

Recycle Plus Proposal Evaluation Criteria

Evaluation Criteria	Weight
Experience	20%
Customer Service	15%
Strength of Operations	20%
Technical Capability	10%
Business Risk	10%
Cost	25%
TOTAL	100%

The External Panel and City Executive Committees mentioned above reviewed the results of the tabulated scores. All three panels recommended the same three proposers. On September 22, 2000, the Administration recommended that the City Council award the contracts as shown in Exhibit 10.

Exhibit 10 Proposed Recycle Plus Contractors

Type of Service	District A	District C				
Single Family	Norcal	Norcal				
Multi-family	GreenTeam					
Yard Trimmings and Street Sweeping	GreenWaste	GreenWaste	Norcal			

Financially Sound, Technically Qualified, And Capable Of Acquiring Essential Capital Equipment

The RFP Financial Review Team summarized their findings as follows: "Overall, we found each of the proposers to be in fairly stable financial condition, with no significant issues that would warrant the immediate elimination from consideration for this RFP process." We concur with the RFP Financial Review Team's finding based upon our review of audited financial statements and discussion with corporate officers.

GreenTeam is a joint venture between GreenWaste Recovery, Inc., Green Valley Disposal and Recycling, and Peninsula Sanitary Service, Inc. As San Jose's current contractor for District A SFD services and citywide MFD services, GreenTeam has a proven ability to collect and process San Jose's solid waste and recyclables. The company provided the ESD with a letter of commitment for a \$30 million line of credit to purchase needed capital equipment.

GreenWaste was founded in 1991 to provide service for the City of San Jose. GreenWaste now serves over 130,000 households in California including 107,000 in the City of San Jose. A significant portion of the company's revenues is from its contract with the City of San Jose. Revenues from this contract represented 29% and 40% of total company revenues for 1999 and 1998, respectively. As of August 31, 1999, the company had total assets of nearly \$16 million, including \$237,000 cash. The company provided the ESD with letters of commitment for credit lines of \$9.5 million to purchase needed capital equipment.

Norcal Waste Systems, Inc., provides solid waste management services throughout California, including collection, transfer, disposal, landfill management, recycling, and other waste services. The company currently serves an estimated 477,000 customers. As of June 30, 2000, the company had total

assets of nearly \$392 million, including nearly \$63 million cash. In its response to the Recycle Plus 2002 RFP, Norcal stated that

The capital expenditures required for this RFP are approximately \$19 million. The Company obviously has adequate resources from which to make the capital expenditures. Should it be necessary, the Company has in place a 5-year Credit Agreement that currently provides for borrowings of \$85 million subject to certain financial covenants... Norcal intends to lease through its own leasing subsidiary all equipment to the subsidiary providing the operations under the San Jose Contract. The lease arrangement will provide for a term of 11 years at an interest rate of 11%.

Norcal's Loss Of The San Bernardino County Contract

Effective July 26, 2000, Norcal Waste Systems, Inc., and Norcal/San Bernardino, Inc., entered into a settlement with San Bernardino County to settle all of the claims asserted against Norcal in a lawsuit the County filed against Norcal. Pursuant to the settlement, Norcal has paid the County \$6,561,000 and may not bid on successor contracts to its 1995 contract with the County for five years. Accordingly, Norcal's contract with San Bernardino will terminate on or before June 30, 2001.

During fiscal years 1999, 1998, and 1997, Norcal's revenues derived from the San Bernardino contract were approximately \$55.1 million (16% of the Company's total revenue), \$65.1 million (19% of the Company's total revenue) and \$55.1 million (17% of the Company's total revenue), respectively. In spite of the loss of this contract, Norcal management believes that revenues and expenses from operations will remain at least comparable to the previous year. As a result, management believes that the "termination will not have a material adverse effect on the Company's financial condition or on its ability to maintain its other operations and service its debt." In addition, according to Norcal officials, Norcal recently was the successful bidder to provide waste services for Palos Verdes Estates, California, is the recommended citywide service provider for Livermore, California, and was recently awarded the contract to operate the Monterey County landfill system and Spokane, Washington's compost facility.

Financially And Operationally Capable Of Performing The Proposed Services

We reviewed the internally-prepared cost proposals for GreenTeam, GreenWaste, and Norcal. Each company prepared a thorough cost of service analysis before submitting their bid proposals. Each company carefully considered the operational requirements of each programmatic element of the proposal, and then allocated labor, operating, capital, and miscellaneous costs to those elements. Each company structured their proposed rates to include profit.

We quickly learned that trucks are the cost centers of the garbage business. Specifically, each route requires a truck and at least one driver. We found that the cost of a truck is between \$160,000 and \$190,000 per year. This includes the cost of a driver, operating and maintenance costs, administrative overhead burden, and straight-line depreciation on equipment.

To the extent that the proposers have correctly calculated the number of trucks required to service the proposed Districts, they should earn a profit. To the extent that more trucks/routes are required, costs will rise accordingly with commensurate profit reductions or even losses resulting.

Potential Operating Issues And Uncertainties

Achieving 25%, 30%, and 35% MFD Recycling Goals

Currently, GreenTeam collects garbage and recycling for MFDs in San Jose. There are about 7,000 MFD garbage containers varying in size from 1 cubic yard bins to 20 cubic yard compactors located at 3,400 MFD complexes. GreenTeam collects these garbage containers from once a week to five times a week. In addition, there are 16,375 MFD recycling carts located at those same MFD complexes. A 96-gallon recycling cart holds about ½ cubic yard of recycling. The current mix of garbage to recycling at MFD complexes is about 87 percent garbage to 13 percent recycling.

Under Recycling Plus 2002, GreenTeam is required to increase the percentage of waste flow that is recycled in each Service District as follows:

1st year⁴ – minimum of 25% recycling 2nd year – minimum of 30% recycling 3rd year – minimum of 35% recycling

GreenTeam's failure to achieve the above recycling targets would result in financial penalties during 2003 and 2004 and possible contract termination at the end of 2005.

In our opinion, increasing the percentage of MFD recycling from 13 percent to 35 percent by the end of 2005 will be challenging for GreenTeam. Not the least of these challenges will be replacing over 16,000 96-gallon recycling carts with as many as 7,000 recycling containers to accommodate the single stream recycling component of Recycle Plus 2002. These 7,000 recycling containers could vary in size from a 96-gallon cart to an 8 cubic yard container.

⁴ The diversion requirements do not cover the first six months of the contract (July 2002 through December 2002) to allow ample time for transition and start-up. Thus, the diversion clock starts ticking on January 1, 2003. The first FULL calendar year of the contract is January – December 2003.

An additional challenge for GreenTeam will be finding adequate space at MFD complexes to locate these 7,000 recycling containers. GreenTeam anticipates locating a recycling container next to each garbage container at each MFD complex. This means GreenTeam will have to co-locate several garbage and recycling containers at many MFD complexes. This may prove to be difficult at some MFD complexes because of space limitations. Consequently, some MFD residents may not recycle as much as they otherwise would to the extent GreenTeam cannot co-locate garbage and recycling containers or recycling is not easy or convenient for MFD residents.

Currently, the City charges MFD owners for garbage containers based upon container size and frequency of pick-up. The City does not charge MFD owners for recycling costs. At this time, the ESD expects to continue that pricing structure under Recyle Plus 2002. However, should the City change its pricing policy and charge MFD owners for recycling containers then GreenTeam will be even more challenged to achieve and maintain the 25%, 30%, and 35% MFD recycling goals of Recycle Plus 2002.

It should be noted that under Recycle Plus 2002, the SFD contractors will also be required to meet diversion requirements. The SFD contractors are required to achieve minimum annual solid waste diversion rates of 35% per service district beginning January 1, 2003. As of 1999, the diversion rates in these districts were:

District A – 28%

District B – 37%

District C - 35%

The proposed haulers have indicated that they do not forsee any problems meeting those targets under the Recycle Plus 2002 single-stream recycling program.

Servicing An Unknown Mix Of Street And Yard Trimmings Cart Set-Outs

Currently, 88 percent of San Jose's 195,000 SFD residences place their yard trimmings in the street for weekly pick-up. The other 12 percent do not have street access and place their yard trimmings in some kind of container such as a gunny sack. These are called mandatory pick-ups. Street pick-up for yard trimmings requires a truck and a loader. The loader picks up the yard trimmings and deposit them in the truck, which can hold about 8 to 10 tons of yard trimmings. When the truck is full, it takes the yard trimmings to a transfer station where it unloads the yard trimmings for later transport to a composting area.

Under Recycle Plus 2002, San Jose's SFD residences will be able to place their yard trimmings in the street or use an optional 96-gallon yard trimmings cart. The 96-gallon yard trimmings cart option is an additional service under Recycle Plus 2002. As a result, under Recycle Plus 2002 San Jose will have a new yard trimmings pick-up service paradigm.

The proposed yard trimmings service presented challenges for the respondents to the Recycle Plus 2002 RFP because of the unknown mix of residences that will use the street for yard trimmings collection versus the new yard trimmings cart option. This challenge revolves around the fact that the mix of on-street to cart pick-ups can dictate what type of equipment the hauler will use or will need to use, and how long it will take to complete a route. For example, if the percentage of carts to street pick-ups is fairly small, then a hauler would probably use the same truck/loader equipment configuration for both types of pick-up. However, as the percentage of cart pick-ups increases, there comes a point where the hauler might switch to a fully automated truck for at least a portion of that day's routes. A fully automated truck, unlike the street pick-up truck, does not require a loader. Instead, the fully automated truck picks up the yard trimmings carts much the same way garbage trucks pick up garbage carts. Thus, while fully automated trucks can be more efficient than the truck/loader configuration, there has to be a sufficiently large percentage of yard trimmings cart pick-ups per route before any fully automated truck efficiencies can be realized.

The ESD informed the proposers at a pre-bidding conference that about 15 percent of San Jose's 195,000 residences would use yard trimmings carts. However, as we noted in Finding I, that figure did not include the 12 percent mandatory pick-ups that would also use a cart.

Of the two recommended providers for YT services, GreenWaste proposed using 11 trucks, 11 loaders, and 1 automated truck in Districts A & B. Norcal, the recommended provider in District C, proposed using 8 trucks, 8 loaders, 6 sweepers, and no automated trucks (see Appendix D).

We do not know at what point a different assumed percentage of yard trimmings cart pick-ups would have changed either GreenWaste's or Norcal's response to the Recycle Plus 2002 RFP. In fact, at this point no one can say with any certainty what the actual percentage of residences using yard trimmings carts will be. Both GreenWaste and Norcal informed us that the initial year of the new contract will be a feeling-out process but that they will be prepared to handle any mix of street and yard trimmings cart pick-ups.

However, in our opinion, both haulers could be impacted if the percentage of yard trimmings cart pick-ups increases to the point where it represents a significant segment of total yard trimmings pick-ups. Should that happen, Norcal and GreenWaste have both indicated that they would probably use more automated trucks than they originally thought when they responded to the Recycle Plus 2002 RFP. This could have operational and financial consequences for the two recommended proposers for yard trimmings services. Officials from both GreenWaste and Norcal indicated that they understood and assumed that risk when they responded to the Recycle Plus 2002 RFP.

Locating, Acquiring, And/Or Building A Headquarters And Materials Recovery Facility

Norcal is the recommended service provider for SFD in Districts A and C, and YT and RSS in District C. Unlike the other two recommended service providers – GreenTeam and GreenWaste, Norcal does not have a physical presence in San Jose. Accordingly, in order for Norcal to perform its required San Jose services, it must locate, acquire, and/or build a headquarters and a Material Recovery Facility (MRF) in San Jose.

Norcal has a Transfer Station for yard trimmings disposal purposes, but that facility is located in San Martin, California – about 20 miles south of San Jose.⁵ That facility location may present Norcal with some travel time issues as described on page 32.

Norcal currently has a headquarter's facility at 650 Martin Avenue in Santa Clara, California. Norcal uses this facility for its administrative offices and to park, store, and maintain its trucks and equipment. This facility occupies about five acres of land. Norcal acquired this property in 1996. According to Norcal officials, they demolished the structure that existed on the property at the time of purchase and built their current facility in 9 months. Norcal's Santa Clara facility cannot accommodate the trucks or equipment Norcal will need to use for any of its San Jose SFD, YT, or RSS services.

According to Norcal officials, they are in the process of trying to locate a sufficiently large parcel of land, either with or without an existing structure, to locate its San Jose Headquarters. Norcal officials contend that they will need to find a 5 to 10 acre site. Norcal is focusing their search in the area of 10th Street and Burke Street, near the Municipal Stadium, and the area around Old Oakland Road and the 101 Freeway.

In our opinion, Norcal may be challenged to find a piece of property in San Jose suitable for their needs and have a headquarters in place by July 1, 2002 – the date Recycle Plus 2002 begins. Accordingly, the ESD should require Norcal to have closed escrow on a suitable property and submit a timeline for securing all required permits for its Headquarters by July 1, 2001. This would give Norcal adequate time to refurbish and construct a headquarters. This would also give the ESD adequate time to put another hauler in place for SFD, YT, and RSS services beginning July 1, 2002, should that prove necessary.

⁵ According to Norcal officials, they will increase the capacity of their San Martin Transfer Station from 100 tons per day to 400 tons per day, if they cannot find a suitable San Jose location. These officials also told us that they are confident that they will receive any and all necessary permit approvals well before Recycle Plus 2002 begins.

We recommend that the ESD:

Recommendation #4

Develop a contingency plan to mitigate the consequences of Norcal not succeeding in its attempt to acquire a suitable property and required permits for its Headquarters by July 1, 2001. (Priority 3)

Norcal also needs to secure the use of a MRF in San Jose. MRFs are where haulers deposit recycled materials for sorting and disposition. The capacity and location of a MRF are both strategically important for a hauler. With Recycle Plus 2002's single-stream recycling, MRFs must be technologically capable of separating commingled recyclables into multiple component parts. A MRF's location is also critical in that it is a major determinate of total travel time for haulers, as discussed on page 29.

Norcal has a contract with California Waste Solutions (CWS) for MRF services. CWS is in escrow to acquire a former construction and demolition MRF at the same 10th Street and Burke Street location noted above. Norcal officials contend that CWS intends to convert the current construction and demolition MRF into a MRF that is capable of processing single-stream recycling.

In our opinion, Norcal's reliance on its contract with CWS for MRF services has an element of risk attached to it. Specifically, some of Norcal's competitors have expressed to us some reservations and skepticism about CWS plan to refurbish the MRF at 10th Street and Burke Street. For example, Norcal's competitors point to potential permitting and size problems with CWS' 10th Street and Burke Street location. For comparison purposes, GreenTeam's MRF located at 575 Charles Street occupies 2.9 acres, while the CWS site is 1.87 acres. It should be noted however, that one of Norcal's competitors also told us that they have a MRF that they would consider making available to Norcal should CWS' MRF not prove to be feasible.

In its response to the Recycle Plus 2002 RFP, Norcal identified the following time schedule for the CWS MRF:

Exhibit 11

Schedule For 10th Street And Burke Street Processing Facility Improvements

Task	Timing
Preliminary discussions with Planning Department	Ongoing
Preliminary discussions with LEA ⁶	Fall 2000
Preliminary design	Fall 2000
Develop operations descriptions	Fall 2000
Planning/LEA review	Early Winter 2000
CEQA review (assume Negative Declaration) ⁷	By Summer 2001
Conditional Use Permit action	By Fall 2001
LEA action, if necessary	By Winter 2001
Facility construction complete	June 2002

Accordingly, the ESD should:

Recommendation #5

Monitor Norcal's progress toward meeting its MRF timeline as proposed in its response to the Recycle Plus 2002 RFP, and develop a contingency plan to mitigate the consequences of Norcal not being able to meet its MRF timeline. (Priority 3)

This is a reasonable requirement to place on Norcal and affords the ESD adequate time to put another hauler in place by July 1, 2002, should that prove necessary.

Predicating Its RFP Response On A 91/2 Hour Workday

Based upon our analysis of Norcal's response to the Recycle Plus 2002 RFP and discussions with Norcal officials, we found that Norcal predicated its proposal for SFD and YT services on a 9½-hour workday. In our opinion, a 9½-hour workday assumption may prove to be operationally difficult for Norcal for two reasons

- Potential union issues related to workweeks that exceed 45 hours; and
- Norcal's 9½-hour workday assumption includes travel time estimates that may be too optimistic.

⁶ LEA is the Local Enforcement Agency.

⁷ CEQA is the California Environmental Quality Act

Should either or both of these potential operational issues materialize, then Norcal will have to acquire and use more trucks than it proposed for SFD and YT services in San Jose. Any additional truck requirements would have attendant cost implications for Norcal and could effect Norcal's ability to make a profit on its SFD and YT services under Recycle Plus 2002.

Potential Union Issues

In Santa Clara County, the majority of Norcal's employee-owners are covered by Collective Bargaining Agreements with Teamsters Local 350⁸, the same Local covering the majority of employees currently serving the City of San Jose. According to Norcal, it has developed a healthy working relationship with Local 350. In 1997, Norcal negotiated a five-year collective bargaining agreement with Local 350 in Santa Clara County. That agreement expires on August 31, 2002. Further, Norcal has a Memorandum of Understanding with Local 350 to recognize Local 350 as the sole and exclusive collecting bargaining representative for all the employees performing services under Recycle Plus 2002 contracts.

As noted above, Norcal predicated its proposal for SFD and YT services on a 9½-hour day. This could be problematic for Norcal because it equates to a 47½-hour workweek. Current collective bargaining agreements with Local 350 place a limit of 45 hours per week on the number of hours a hauler can require a driver to work. The 45 hours-per-week limit is 2½ hours less per week than the 47½ hours per week upon which Norcal predicated its proposal. It should be noted, however, Local 350-represented drivers can volunteer to work more than 45 hours per week. Further, according to Norcal officials, once a driver volunteers to start a route, they must finish it even if it causes them to work more than 45 hours in a calendar week.

In our opinion, strict adherence to the 45-hour workweek could have significant operational and financial consequences for Norcal. Specifically, we estimate that predicating its response to the Recycle Plus 2002 RFP on a 9-hour day (45-hour workweek) instead of a 9½-hour day (47½-hour workweek) would increase the number of trucks and loaders required for SFD and YT as follows:

26

⁸ Sanitary Truck Drivers & Helpers, Local 350, is an affiliate of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America.

Exhibit 12
Estimate Of Truck/Loader Requirements

		ıming 9½ F Workdays		Assumin	g 9 Hour W	Vorkdays
Equipment	SFD District A	SFD District C	YT District C	SFD District A	SFD District C	YT District C
Trucks (+ spares)	31 (3)	25 (3)	8 (2)	35	28	9
Loaders (+ spares)			8 (1)			9

As shown above, strict adherence to a 9-hour workday could cause Norcal to add as many as 8 trucks and 1 loader, not counting spare trucks or loaders. At an estimated cost to Norcal of \$162,000 per year per truck, this would add a significant element of cost for Norcal.

Optimistic Travel Time Estimates

Another potential operational uncertainty for Norcal lies in the travel time estimates it assumed when it responded to the Recycle Plus 2002 RFP. Travel time is a critical element of the total workday for haulers. As travel times increase, the time available to complete a route decreases on a one-to-one basis. Further, as the time available to complete a route decreases, the number of trucks and drivers a hauler needs to use increases. The formula we used for calculating route collection time for SFD services is depicted below:

Number of Residences In A District	÷	5 Days/ Week	÷	Number Of Trucks	=	Residences Per Route	X	Estimated Seconds Per Pick-Up	÷	60 Seconds	=	Minutes To Complete The Route
---	---	-----------------	---	------------------------	---	-------------------------	---	--	---	---------------	---	---

The minutes to complete the route shown above must be accommodated within a driver's workday as shown below:

Exhibit 13

Typical Driver's Workday Assuming An 8-Hour Workday

	Minutes
Pre- and Post-Route Time	30
Break	30
Route Collection Time	300
Travel Time	120
Total Workday	480 ⁹

Our analysis indicates that Norcal's assumed travel times in its response to the Recycle Plus 2002 RFP are as shown below, along with the other elements of Norcal's assumed 9½ hour work day.

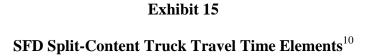
Exhibit 14
Norcals's Travel And Other Time-Element Assumptions

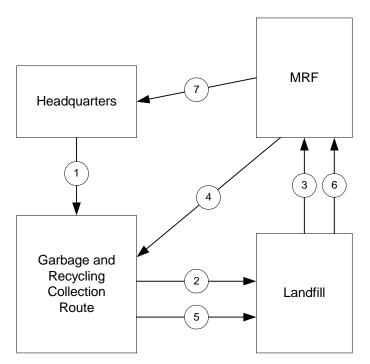
	SF	YT	
	District A	District C	
Pre- and Post-Route Time	30	30	30
Break	30	30	30
Route Collection Time	350	345	360
Travel Time	160	165	150
Total Workday (9½ Hours)	570	570	570

In order to put the assumed travel times shown above into their proper perspective, one must understand what makes up travel time. For SFD service in San Jose, typical travel time is depicted below in Exhibit 15, assuming the split-content truck Norcal proposes to use and two truckloads per route.

28

⁹ Does not include an unpaid 30-minute lunch break.





- ① Headquarters to Route
- 2 Route to Landfill (including time to unload)
- 3 Landfill to MRF
- ④ MRF to Route
- ⑤ Same as ②
- 6 Same as 3
- ⑦ MRF to Headquarters

It should be noted that the split-content truck that both Norcal and GreenTeam propose to use allows the hauler to collect both garbage and recycling with one truck and one operator. Thus, the truck/operator can collect both garbage and recycling with one pass down the street. According to a split-content truck manufacturer, one truck, operator and pass down the street "... saves time, labor, fuel and extra vehicle costs." However, using one truck to collect one route also results in more travel time for that one vehicle because the same vehicle 1) must go to both the landfill and the MRF and 2) probably will need to make at least two trips to the landfill and the MRF in order to complete a route.

As can be gleaned from the above depiction, the location of the hauler's headquarters and MRF can have a profound impact on travel time. Our

¹⁰ Note that if the Headquarters and MRF are co-located, the seventh leg of this diagram is unnecessary. The landfill is Newby Island at Dixon Landing Road and Highway 880 for all the Recycle Plus haulers in San Jose.

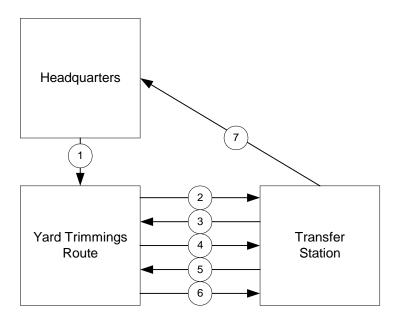
assessment of Norcal's proposal was complicated by the fact that, as described previously, Norcal does not have a definite site for its Headquarters or MRF in San Jose. Therefore, estimating travel times for the seven legs of travel time in Norcal's proposal is somewhat speculative.

The formula we used for calculating route collection time for YT is depicted below:

Number Of Residences In A District	X	Estimated Percentage Of Residences With YT Set-Outs	÷	5 Days/ Week	÷	Number Of Trucks/ Loaders	=	Residences Per Route	X	Estimated Seconds Per Pick-Up	÷	60 Seconds	=	Minutes To Complete The Route
--	---	---	---	-----------------	---	---------------------------------	---	-------------------------	---	--	---	---------------	---	---

The difference between the above formula and the SFD formula on page 27 lies in the need to estimate the percentage of residences with YT set-outs. Unlike SFD services, YT services are seasonal. Depending on the time of the year, the percentage of residences with set-outs can vary from about 30 percent to over 50 percent. That percentage difference can be exacerbated by seasonal variations in YT set-out volumes. For our purposes, we assumed that 50 percent of the residences in a District would have YT set-outs.

Travel time for YT service in San Jose is depicted below assuming three truck loads per route.



- ① Headquarters to Route
- 2 Route to Transfer Station (including time to unload)
- ③ Transfer Station to Route
- 4 Same as 2
- ⑤ Same as ③
- 6 Same as 2
- Transfer Station to Headquarters

It should be noted that the highest set-out percentage and volume months for YT services are March, April, May, November, and December. It may be possible for a hauler to collect a YT route using only two loads during lower volume months. In that case, two of the seven travel time elements in Exhibit 16 would be eliminated.

As with SFD services in San Jose, travel time for YT services is critical, and the location of the hauler's headquarters and transfer station are key travel time elements.

We have made an estimate of Norcal's travel time requirements for SFD and YT assuming the following:

- Headquarters at 10th Street and Burke Street
- MRF at 10th Street and Burke Street

¹¹ Note that if the Headquarters and transfer station are co-located, the seventh leg of this diagram is unnecessary.

- Transfer Station in San Martin, California
- Travel times per an internet website (zip2.com) and actual driving experience from six selected San Jose District C locations.
- Travel times for SFD District A locations based upon the current hauler's estimates of travel times.
- Time to unload at the:
 - MRF 8 minutes
 - Landfill 15 minutes
 - Transfer Station 8 minutes

Using the above assumptions, we estimated the travel times for Norcal for SFD and YT services in San Jose. We also compared our estimate to the assumptions Norcal used to prepare its proposal. The results of our analysis are shown below.

Exhibit 17

Comparison Of Norcal's And The City Auditor's Estimated
Travel Times For SFD And YT In Districts A And C

	No	rcal's Tra Assump	avel Time tions	City Auditor Travel Time Estimates					
	SFD D	istricts	YT District	SFD D	istricts	YT District			
	A C		С	A	C	С			
Total Time In Minutes	160	165	150	168	171	214			

In our opinion, Norcal's estimates of travel time appear to be optimistic, particularly as it relates to YT services in District C and, to a lesser extent, SFD services in District C. As we noted earlier, Norcal intends to use its Transfer Station in San Martin, which is 20 miles south of San Jose, for YT services. Norcal estimates that it can make three round trips from its District C routes to San Martin in 150 minutes, or 50 minutes per round trip. This includes the time needed to drop-off three loads of yard trimmings at the San Martin Transfer Station. By way of contrast, we estimate it will take Norcal 214 minutes to make three round trips to its San Martin Transfer Station. We based our estimate on travel times per an internet website – zip2.com, from six selected San Jose District C sites. These six sites were:

- Camden Avenue and Hillsdale Avenue
- Almaden Expressway and Blossom Hill Road
- Almaden Expressway and Rajkovich

- Curtner and Lincoln
- Blossom Hill and Monterey Highway
- Santa Teresa Boulevard and Bernal

It should be noted that our estimates of Norcal's travel time for YT services in District C are based upon the posted speed limit – not peak commute traffic times. This may not be a realistic assumption on our part for two reasons. First, our estimate assumed extensive use of Highway 101 from South San Jose to San Martin at an average rate of speed of 65 miles per hour. During heavy commute times of the day or when there is an accident, it is not possible to average 65 miles per hour on Highway 101. Second, our estimate also assumed the use of Highway 85 from some District C locations at an average rate of speed of 65 miles per hour. We noted during our field work that the posted weight limit on Highway 85 is $4\frac{1}{2}$ tons. This may mean that Norcal would not be able to use Highway 85 for YT services in District C because a fully loaded YT truck weighs about 8 to 10 tons. In that eventuality, Norcal would have to use alternative slower routes to connect with Highway 101.

We also have to qualify our estimate of travel times for SFD services in District C. As with YT services in District C, we probably underestimated the travel times because we assumed a rate of speed equal to the posted speed limit. During heavy commute times of the day or under certain driving conditions, averaging the speed limit is not possible and travel times will increase accordingly.

The significance of additional travel times lies in the fact that it could cause Norcal to add trucks and drivers to provide the agreed-upon services. Specifically, as shown in Exhibit 12, we estimate that for every additional 30 minutes of travel time, Norcal may have to add up to four additional trucks in District A and three additional trucks in District C for SFD services. We also estimate that for every additional 30 minutes of travel time, Norcal may have to add up to three trucks and loaders for YT service in District C. In our opinion, this could prove to be costly for Norcal if we again use our estimate of \$162,000 per year per truck of additional cost.

It should be noted that Norcal officials told us that, ideally, they will locate and acquire a parcel of land in San Jose that will be (1) large enough to accommodate its Headquarters and Transfer Station needs, and (2) proximate to its proposed MRF location at 10th Street and Burke Street. Should Norcal be successful in acquiring such a parcel of land, many of our concerns about Norcal's potential operational issues and uncertainties will be eliminated or significantly mitigated. Further, Norcal officials told us that another hauler has offered to discuss with Norcal the possibility of Norcal using the other hauler's Transfer Station which is located near Newby Island off Highway 880 and Dixon Landing Road.

Finally, it should also be noted that we did not see the same difficulties noted for Norcal when we analyzed GreenTeams's and GreenWaste's proposals. For both haulers, we know where their Headquarters, MRF, and Transfer Station are located. In addition, GreenTeam's Headquarters and MRF are co-located on the same property, as is GreenWaste's Headquarters and Transfer Station. This means that for GreenTeam and GreenWaste one of the seven legs of travel time shown above for both SFD and yard trimmings services is eliminated. In addition, it should be noted that GreenTeam's contract with Local 350 expires on July 1, 2002, the day Recycle Plus 2002 begins. However, both GreenTeam and GreenWaste predicated their proposals on a shorter workday than Norcal did in its response to the Recycle Plus 2002 RFP. Further, GreenWaste's drivers do not belong to a union. As a result, the 45-hour work week issue described above does not 1) apply to GreenWaste, and 2) appear to be as much of an issue for GreenTeam as it could be for Norcal under the current collective bargaining agreement with Local 350. This, of course, is subject to change pending the outcome of future negotiations between the haulers and Local 350 regarding collective bargaining agreements for drivers performing services under Recycle Plus 2002 contracts.

Applicable Provisions In The Proposed Recycle Plus 2002 Collection Services Agreement

According to the proposed Collection Services Agreement, the contractor is responsible for providing whatever equipment and personnel are required to provide the contracted service. Specifically:

Labor and Equipment. CONTRACTOR shall provide and maintain all labor, equipment, tools, facilities, and personnel supervision required for the performance of CONTRACTOR'S obligations under this Agreement. CONTRACTOR shall at all times have sufficient backup equipment and labor to fill CONTRACTOR'S obligations under this Agreement. No compensation for CONTRACTOR'S services or for CONTRACTOR'S supply of labor, equipment, tools, facilities or supervision shall be provided or paid to CONTRACTOR by CITY or by any Service Recipient except as expressly provided by this Agreement.

Furthermore, the proposed agreements outline the purpose of the transition period between the signing of the agreements and commencement of service on July 1, 2002.

Transition. CONTRACTOR understands and agrees that the time between the formal Agreement signing and July 1, 2002 is intended to provide the CONTRACTOR with sufficient time to, among other things, order equipment, prepare necessary routing changes, implement changes in the recycling program, obtain permits and licenses, establish/build facilities, obtain required service agreements, begin the public awareness

campaign as part of the CONTRACTOR'S transition program, coordinate with the CITY'S public awareness campaign, and integrate other program changes as specified in this Agreement. CONTRACTOR shall be responsible for the provision of all Collection services beginning July 1, 2002. Accordingly, CONTRACTOR shall provide one hundred percent (100%) of the SFD [and/or MFD] Collection Services set forth in this Article, including full implementation of commingled SFD [and/or MFD] Recycling Collection Services, no later than October 1, 2002.

The proposed agreements state that "Ninety (90) days prior to the commencement of ... Services, the CONTRACTOR shall provide the CITY with maps precisely defining Collection routes..."

In our opinion, because of the possible consequences of the aforementioned operational issues and uncertainties, the ESD should impose additional reporting requirements on the proposed contractors. Accordingly, we recommend that the ESD:

Recommendation #6

Require the proposed contractors to (1) submit preliminary workday, travel time, and equipment estimates by July 1, 2001, for ESD analysis and written comment, and (2) respond in writing to any ESD written comments within thirty (30) days of receipt. (Priority 3)

This will help the ESD ensure a smooth transition to the Recycle Plus 2002 Program and uninterrupted service to San Jose residents.